

ABSTRACT

**[0103]** Disclosed is a device useful for performing an assay comprising a substrate having interconnecting channels that open out onto a surface for sample application, the channels being provided in at least one cross-sectional area with a first binding substance capable of binding a particular analyte, the substrate being an electrochemically manufactured metal oxide membrane and containing the first binding substance within the through-going channels. Similar devices are also useful for chemical synthesis. Assay and chemical synthesis methods are also disclosed, as are kits for performing the assays or chemical syntheses.

09997213-112701